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Functional Plant Biology

Supplementary Material

How the vertical gradient of light in the understorey and water seasonality affect leaf traits of *Vanilla phaeantha* (Orchidaceae), a crassulacean acid metabolism (CAM) hemiephyte

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Supplementary Fig. S1 Environmental characterization of a *Vanilla phaeantha* population living in a gallery forest in the Cerrado, municipality of Araguari, Minas Gerais, Brazil. **a-b**) Temperature (°C) and Relative Humidity (%) measured in the understory every 30 minutes over 24 hours. Data were obtained during the rainy (a) and dry (b) seasons.



Supplementary Fig. S2 Chlorophyll a fluorescence in Vanilla phaeantha leaves (n = 6) from three height strata along the phorophyte during the rainy (a and c) and dry (b and d) seasons in a gallery forest in the Cerrado. Data were collected at 9 a.m. a-b) Effective quantum yield of Photosystem II (Δ F/Fm'). c-d) Electron transport rate (ETR). Data were analyzed by nonlinear regression models: "Two-phase decay" for Δ F/Fm' and "one-phase association" for ETR. ETR The cardinal points from the curves were analyzed by two-way ANOVA and the means were contrasted by the Tukey test (p < 0.05). Means followed by the same letters are not significantly different (see Table 24)